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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/757,823	01/15/2004	Gary M. Klinefelter	F12.12-0092	5507
7590	05/24/2005		EXAMINER	
Brian D. Kaul Westman, Champlin & Kelly Suite 1600 900 Second Avenue South Minneapolis, MN 55402-3319			GHATT, DAVE A	
			ART UNIT	PAPER NUMBER
			2854	
DATE MAILED: 05/24/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

H.A

Office Action Summary	Application No.	Applicant(s)	
	10/757,823	KLINEFELTER, GARY M.	
	Examiner	Art Unit	
	Dave A. Ghatt	2854	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 March 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 and 7-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 7, and 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Ellis (US 5,773,188). With respect to claims 1, 7, and 8, Ellis teaches the claimed printing method and apparatus. As illustrated in Figure 2, Ellis teaches an intermediate transfer sheet (that correspond to a desired size relating to a size of a card 8) including a backing film 7 carrying an image receiving transfer layer 5 having a print receptive surface. Insofar as a card is defined, the flat receptor 8, which as outlined in column 5 lines 55-57 may be essentially any base, whether paper, glass, metal, china, plastic, fabric, wood, or board, constitutes a card. Figure 2 also illustrates a laser printhead (not numbered), which prints on the print receptive surface 4 of the intermediate transfer sheet. With respect to the broad requirements for a source for at least one transfer sheet and at least one card, the system of Ellis must inherently include a source of at least one intermediate transfer sheet and a source for at least one card, in order for the apparatus and method to be operable. Similarly, the system of Ellis, illustrated in Figure 2, must inherently include some sort of sheet drive or transportation to move the intermediate transfer sheet past the printhead in a sequential manner. The apparatus of Ellis must also include some sort of card drive in order for the apparatus to be operable. Figure 2 also illustrates a laminator

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with heated rolls that receive the intermediate sheet after printing and adheres the image receiving transfer layer to the receptor. In column lines 57-60, Ellis teaches peeling off the backing film 7 from the image-receiving layer after lamination, therefore the apparatus must include a separator as broadly defined.

It should be noted that the language of claims 1, 7 and 8 are broad, and any structure that provides the recited functions, must also meet the limitations as outlined. Furthermore, the applicant is reminded that the apparatus of Ellis must include some type of card source, transfer sheet source, sheet drive transportation means, or separator in order to be operational.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (US 5,773,188) in view of Sarraf et al. (US 5,241,328). Column 4 lines 40-65 of Ellis teach the steps of carrying an image-carrying layer 7 to a card. With respect to the requirement for a polymer, Ellis teaches in claims 1 and 2, an image carrying polymer layer. As illustrated in Figure 2, Ellis also teaches the step of printing on a surface 4 of a layer on the intermediate transfer sheet. Ellis also teaches the step of providing a card 8 to overlie the layer on which the printing has taken place. Insofar as a card is defined, the flat receptor 8, which as outlined in column 5 lines 55-57 may be essentially any base, whether paper, glass, metal, china, plastic,

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fabric, wood, or board, constitutes a card. Figure 3 also illustrates the step of passing the card and the intermediate transfer sheet through a laminator to laminate a portion of the layer to the card. In column lines 57-60, Ellis teaches peeling off the backing film 7 from the image-receiving layer after lamination. In fact, Ellis teaches all the claimed steps, except for specifically stating that the laser ablation apparatus prints ink or dye on the intermediate transfer sheet. Sarraf et al. teaches a laser ablation apparatus for transferring images, similar to that of Ellis. As outlined in the abstract, the apparatus of Sarraf et al. includes a donor element that transfers dye onto a receiving sheet. To one of ordinary skill in the art, it would have been obvious to include a dye-transferring laser ablation step, as taught by Sarraf et al., in the method of Ellis, in order to obtain high resolution images, as taught by Sarraf et al. in column 1 lines 30-39. The applicant should note that the teaching of Sarraf et al. is applicable to the intermediate layer of Ellis because the advantage of high resolution is a desired result applicable to any layer.

With respect to claim 14 and the requirement for printing reverse images on the layer, the primary reference Ellis teaches this feature in column 4 line 59.

5. Claims 2, 3, 12, are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (US 5,773,188) in view of Klinger (US 6,174,404 B1). With respect to claims 2 and 12, as outlined in the above rejection to claims 1, 7, 13, and 14, Ellis teaches all the claimed structure except Ellis is silent as to whether intermediate transfer sheets are cut to a size providing sheet extensions from at least one side of the card. Klinger teaches a method and apparatus for laminating plastic cards, similar to that of Ellis. The apparatus of Klinger includes a source for feeding intermediate sheets to be laminated onto cards 40, similar to that of Ellis. As illustrated

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in Figure 4 of Klinger, the intermediate transfer sheet taught by Klinger is cut to a size that extends from at least one side of the card 40. As shown in Figure 4, Klinger teaches the transfer sheets larger than the card, with printing extending from edge to edge. To one of ordinary skill in the art, it would have been obvious to include a transfer sheet cut to a size that extends past at least one side of the card, as taught by Klinger, in the invention of Ellis, because as illustrated in Figure 4 of Klinger, this ensures that the entire card including the edges are covered by the laminate.

With respect to the requirement for printing to extend from edge to edge, the applicant should note that as outlined by *Merriam-Webster*, “edge” is defined as “a point near the beginning or the end.” Figure 5 of Klinger shows printing extending from one point near the beginning or the end of card 40, to another point near the beginning or the end of the card 40, which is all that is required to meet this limitation.

With respect to claim 3, as outlined above, Ellis teaches all the claimed structure except Ellis is silent as to whether the source or intermediate transfer sheet comprises a plurality of intermediate transfer sheets, and a sheet feeder for feeding individual sheets to the printhead. Klinger teaches a method and apparatus for laminating plastic cards, similar to that of Ellis. The apparatus of Klinger includes a source for feeding intermediate sheets to be laminated onto cards 40, similar to that of Ellis. Column 5 lines 28-30 of Klinger teach a feed section 12 (illustrated in Figure 2) from which transfer sheets are fed by means of a group of rollers 13. To one of ordinary skill in the art, it would have been obvious to use the sheet source and feeding system of Klinger, in the apparatus of Ellis because systems as taught by Klinger are conventionally used to feed substrates through printing and laminating apparatuses.

6. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (US 5,773,188) in view of Sarraf (US 5,241,328) as applied to claims 13 and 14 above, and further in view of Klinger (US 6,174,404 B1). As outlined above, Ellis in view of Sarraf et al. teaches all the recited steps except for the provision of sensors as recited. Klinger teaches a setting section 11 with sensors 29. To one of ordinary skill in the art, it would have been obvious to use the sensor of Klinger, in the method of Ellis and Sarraf et al. for the proper setting of images in the lamination section, as taught by Klinger in column 5 lines 57-67.

7. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (US 5,773,188) in view of Louie (US 6,270,072). As outlined in the above rejection to claims 1, 7, 13, and 14, Ellis teaches all the claimed structure except Ellis is silent with about the structure of the card source. As outlined in the abstract, Louie teaches a card feeder. With respect to claim 4, as shown in Figure 1 and as outlined in column 3 lines 24-29, Louie teaches a source for at least one card, for holding a stack of cards. To one of ordinary skill in the art, it would have been obvious to use the card source as taught by Louie, in the apparatus of Ellis in order to provide a card feeder that is convenient to load, as taught by Louie in column 2 lines 60-62. Furthermore, column 1 lines 9-23 of Louie outlines that systems as taught by Louie are conventionally used to feed substrates through printing and laminating apparatuses.

With respect to the requirements of claim 5, the primary reference of Ellis teaches heated laminated rolls as illustrated in Figure 2. Therefore the apparatus must inherently include a heater.

8. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (US 5,773,188) in view of Sarraf (US 5,241,328) as applied to claims 13 and 14 above, and further in view of Louie (US 6,270,072). Ellis in view of Sarraf teaches all the claimed subject matter, including the step of feeding individual cards to a position to overlie the intermediate transfer sheet. (See Figure 2 of Ellis.) The applicant should note that in order to produce a proper transfer, the method of Ellis must include an indexing step, as broadly recited. Ellis and Sarraf teach all the method steps except for providing a supply of cards. As outlined in the abstract, Louie teaches a card feeder. With respect to claim 4, as shown in Figure 1 and as outlined in column 3 lines 24-29, Louie teaches a source for at least one card, for holding a stack of cards. As outlined above, Ellis in view of Sarraf teaches all the recited steps except for providing card stacking. To one of ordinary skill in the art, it would have been obvious to use the card supply as taught by Louie, in the method of Ellis and Sarraf, in order to provide a card feeder that is convenient to load, as taught by Louie in column 2 lines 60-62. Furthermore, column 1 lines 9-23 of Louie outlines that systems as taught by Louie are conventionally provided in processing substrates through printing and laminating apparatuses.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (US 5,773,188) in view of Levine (US 5,647,938). As outlined in the above rejection to claims 1, 7, 13, and 14, Ellis teaches all the claimed structure, except the structure of the separator is not known. Levine teaches an imaging apparatus that includes a separator. As illustrated in Figure 1, and as Levine teaches a knife-like separator 32 (column 5 line 30-32) that includes a ramp

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surface. To one of ordinary skill in the art, it would have been obvious to use the separator of Levine, in the apparatus of Ellis in order to split the backing sheet from the remainder of the material, to guide the backing away from the remaining sheet as taught in Levine in column 5 lines 30-37.

10. Claims 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis in view of Louie as applied to claims 4 and 5 above, and further in view of Kurokawa et al. (US 6,489,266). As outlined in the above rejection, Ellis and Louie teach all the claimed subject matter, except for an inkjet printhead or a dye sublimation printhead. As outlined in column 4 lines 40-46 and in column 5 lines 1-30, Kurokawa et al. teaches an apparatus that uses either an inkjet printhead or a sublimation dye printhead for transferring an image to transfer sheet. To one of ordinary skill in the art, it would have been obvious to use an inkjet printhead or a dye sublimation printhead, as taught by Kurokawa et al., in the apparatus of Ellis, in order to form a high quality image as taught by Kurokawa et al. in column 1 lines 64-67. Furthermore, any desired printhead may be used so long as it produces an image. With respect to claim 11 and the requirement for a supply of dye sublimation ribbon, the applicant should note that to one of ordinary skill in the art, the use of the ribbon would have been obvious because ribbons are routinely and conventionally used in conjunction with sublimation printheads.

Examiner's Comments

11. The applicant should note that in view of the applicant's arguments on page 14 of the Appeal Brief dated March 10, 2005, the examiner has withdrawn all rejections based on Haas et al. (US 6,261,012). However, the claims in question, i.e., claims 4, 5, 10, 11, and 16, have all been rejected. Because claims 4, 5, 10, 11, and 16 are now rejected on new grounds, this action is non-final.

12. With respect to the applicant's arguments that the Ellis reference does not anticipate the recited structure, the examiner respectfully disagrees. As stated in the rejection statement, the language of claims 1, 7 and 8 are very broad, and any structure that provides the recited functions, must also meet the limitations as outlined. Furthermore, the applicant is reminded that in order to function, the apparatus of Ellis must include some type of card source, transfer sheet source, sheet drive transportation means, or separator.

13. With respect to claim 12 and the requirement for printing to extend from edge to edge, as outlined in the rejection statement, "edge" as defined by *Merriam-Webster*, is "a point near the beginning or the end." Figure 5 of Klinger shows printing extending from one point near the beginning or the end of card 40, to another point near the beginning or the end of the card 40, which is all that is required to meet this limitation.

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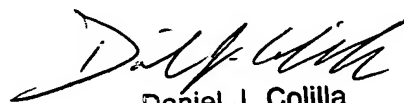
Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dave A Ghatt whose telephone number is (571) 272-2165. The examiner can normally be reached on Mondays through Friday 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew H Hirshfeld can be reached on (571) 272-2168. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DAG


Daniel J. Colilla
Primary Examiner
Art Unit 2854